

CLAIMS

We claim:

1. A method of making a return roller for use in a conveyor system, said method comprising:
 - extruding an elongated roller core defining a radially outwardly facing surface, and including an axial opening for receiving a shaft; and
 - 5 coextruding a coating over said radially outwardly facing surface for engagement with a conveyor belt.
2. The method as in claim 2, including forming at least one axially extending discontinuity in said coating to provide debris relief and indicate wear of said coating when said return roller is used in the conveyor system.
3. The method as in claim 2, in which said at least one discontinuity does not expose said radially outwardly facing surface of said core.
4. The method as in claim 2, in which said at least one discontinuity exposes at least a portion of said core.
5. The method as in claim 1, in which extruding said elongated roller core includes forming an outer cylindrical shell to define said radially outwardly facing surface.

6. The method as in claim 5, in which extruding said elongated roller core includes forming an inner cylindrical shell joined to said outer cylindrical shell by at least one radially extending spoke.

7. The method as in claim 1, in which extruding said elongated roller core includes forming a plurality of radially outwardly extending spokes, each of said spokes having distal ends, wherein said distal ends define said radially outwardly facing surface, and said coating is coextruded onto said distal ends.

8. The method as in claim 1, in which at least one shaft is inserted into said core.

9. The method as in claim 1, in which said core is extruded onto a shaft.

10. The method as in claim 1, including fixing an end cap to each end of said core.

11. The method as in claim 1, in which said elongated roller core is cylindrical, and said method includes extruding a second core having radially extending ribs, and inserting said second core into said elongated roller core, wherein distal ends of said ribs engage an inner surface of said elongated roller core.

12. The method as in claim 1, in which said axial opening for receiving the shaft has a non-circular cross section.

13. A method of making a return roller for use in a conveyor system, said method comprising:

extruding an elongated core defining a radially outwardly facing surface;

coextruding a coating onto said outwardly facing surface which bonds to at least a
5 portion of said radially outwardly facing surface; and

forming at least one axially extending discontinuity in said coating as said coating is coextruded onto said radially outwardly facing surface to provide debris relief and indicate wear of said coating.

14. The method as in claim 13, in which said coating is coextruded onto said radially outwardly facing surface in strips to form said at least one discontinuity.

15. The method as in claim 13, in which said core is extruded onto a shaft.

16. The method as in claim 13, in which said core is formed from a thermoplastic material.

17. The method as in claim 13, in which said coating is formed from a material having a coefficient of friction that is greater than the coefficient of friction of said core.

18. The method as in claim 13, in which extruding said core includes forming a plurality of radially outwardly extending spokes, wherein each of said spokes has a distal end, and said distal ends define said outwardly facing surface, and said at least one discontinuity in said coating is formed between at least one pair of adjacent spokes.

19. The method as in claim 13, in which extruding said core includes forming an outer cylindrical shell defining said outwardly facing surface.

20. The method as in claim 19, in which extruding said core includes forming at least one spoke and an inner cylindrical shell, wherein said at least one spoke extends radially inwardly from said outer cylindrical shell toward said inner cylindrical shell.

21. The method as in claim 13, in which said discontinuity exposes at least a portion of said core.

22. The method as in claim 13, in which said discontinuity does not expose at least a portion of said core.

23. The method as in claim 13, including fixing an end cap to each end of said core.

24. The method as in claim 13, in which said elongated roller core is cylindrical, and said method includes extruding a second core having radially extending ribs, and inserting said second core into said elongated roller core, wherein distal ends of said ribs engage an inner surface of said elongated roller core.

25. The method as in claim 13, in which said axial opening for receiving the shaft has a non-circular cross section.